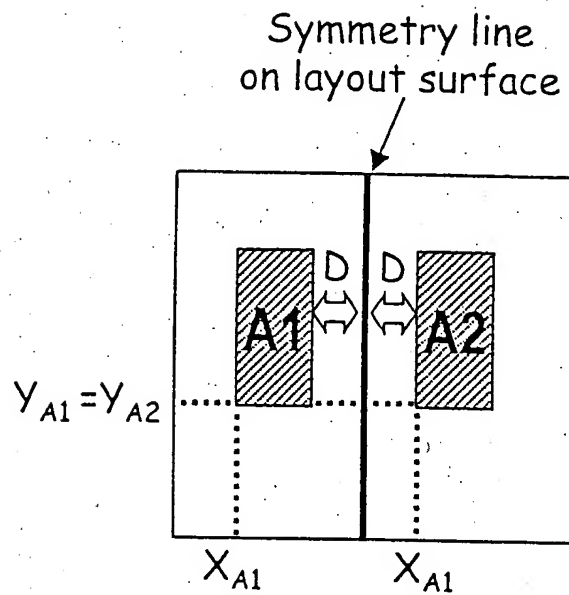


Fig 1  
(Prior Art)

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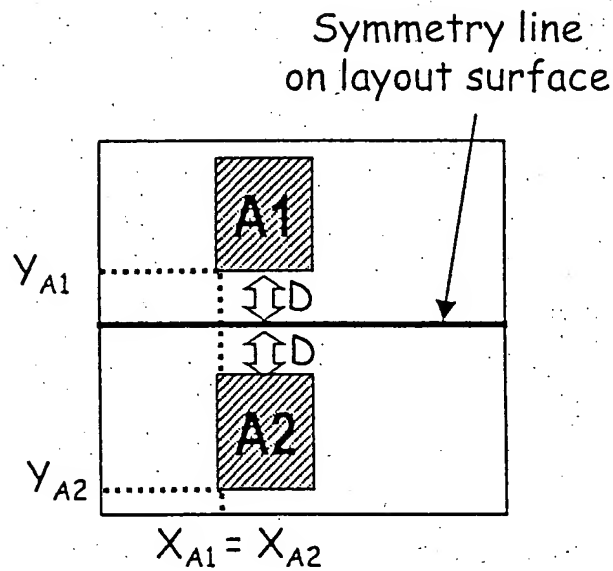


Components A1 and A2 are  
symmetrically placed about  
the vertical symmetry line

Fig 2

(prior art)

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Components A1 and A2 are  
symmetrically placed about  
the horizontal symmetry line

Fig 3

(prior art)

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Fig 4



One example component "R"

(prior art)



8 possible geometric orientations  
for any component "R"

Fig 5

(prior art)

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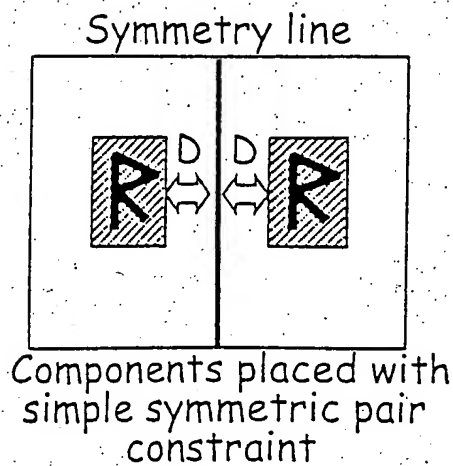


Fig 6

(prior art)

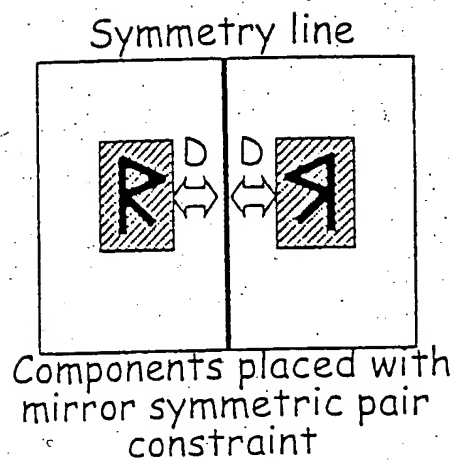


Fig 7

(prior art)

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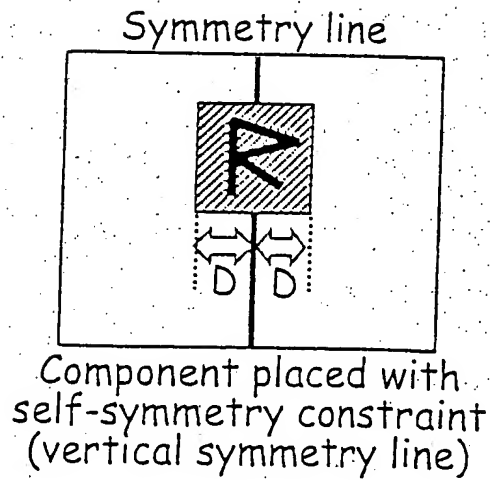


Fig 8  
(prior art)

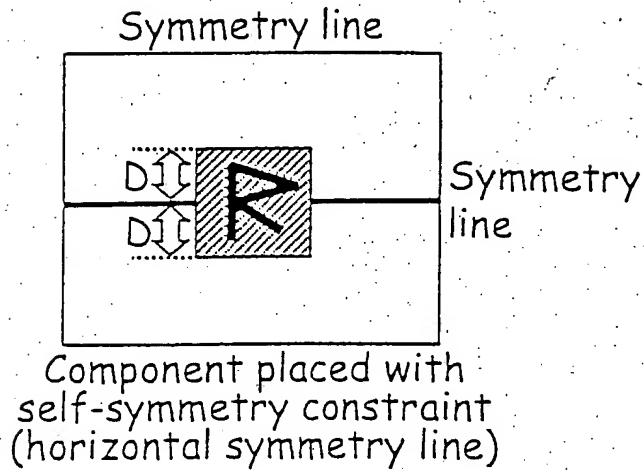


Fig 9

(prior art)

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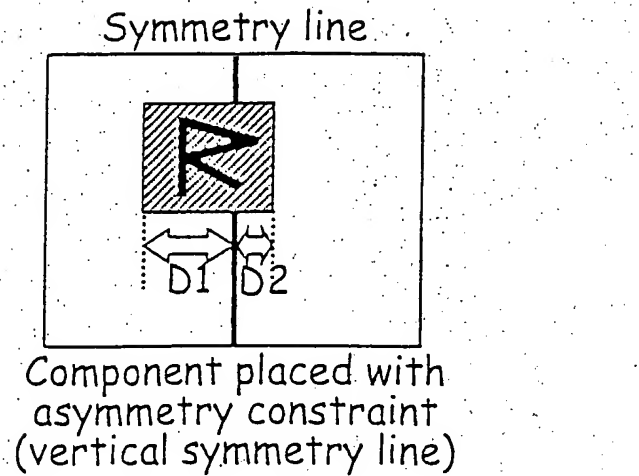


Fig 10  
(prior art)

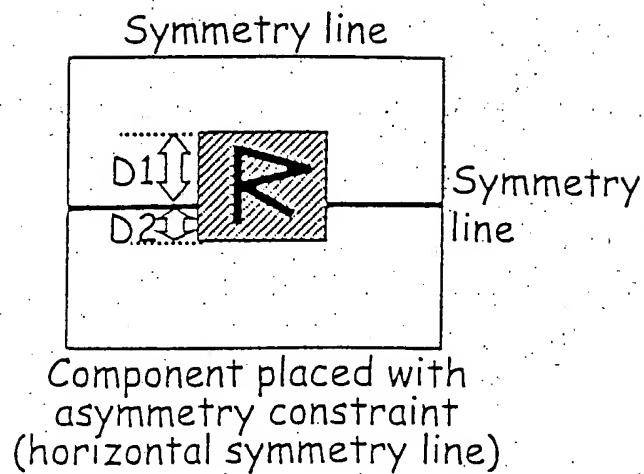


Fig 11  
(prior art)

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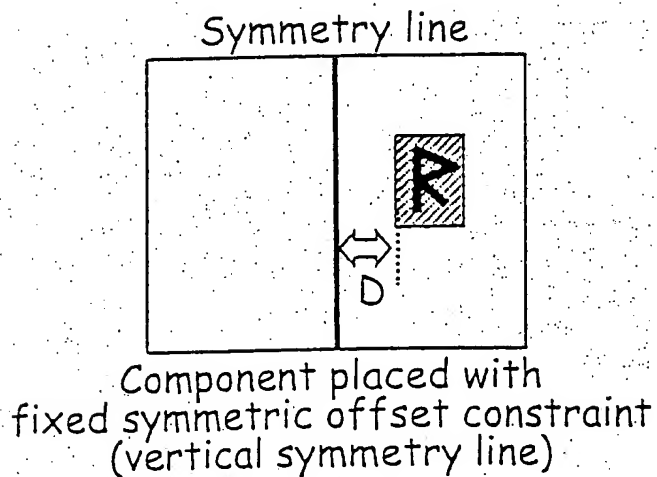


Fig 12  
(prior art)

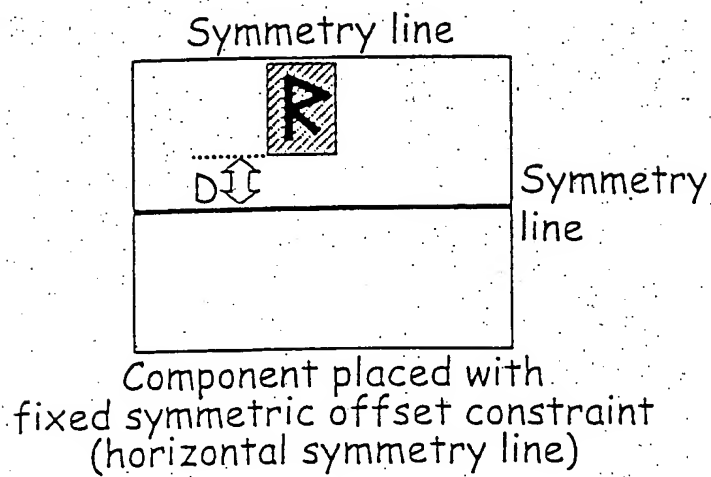


Fig 13  
(prior art)



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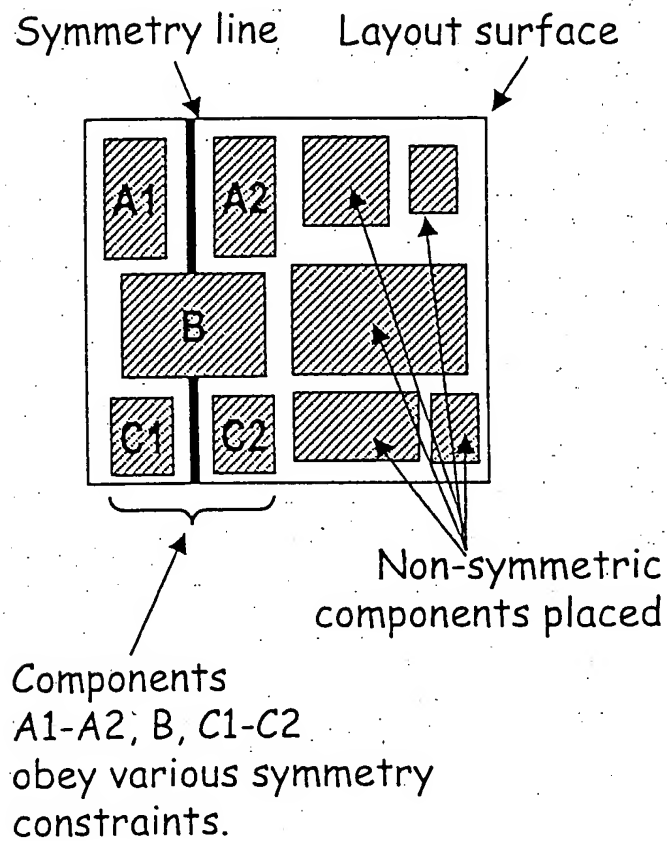


Fig 14  
(prior art)

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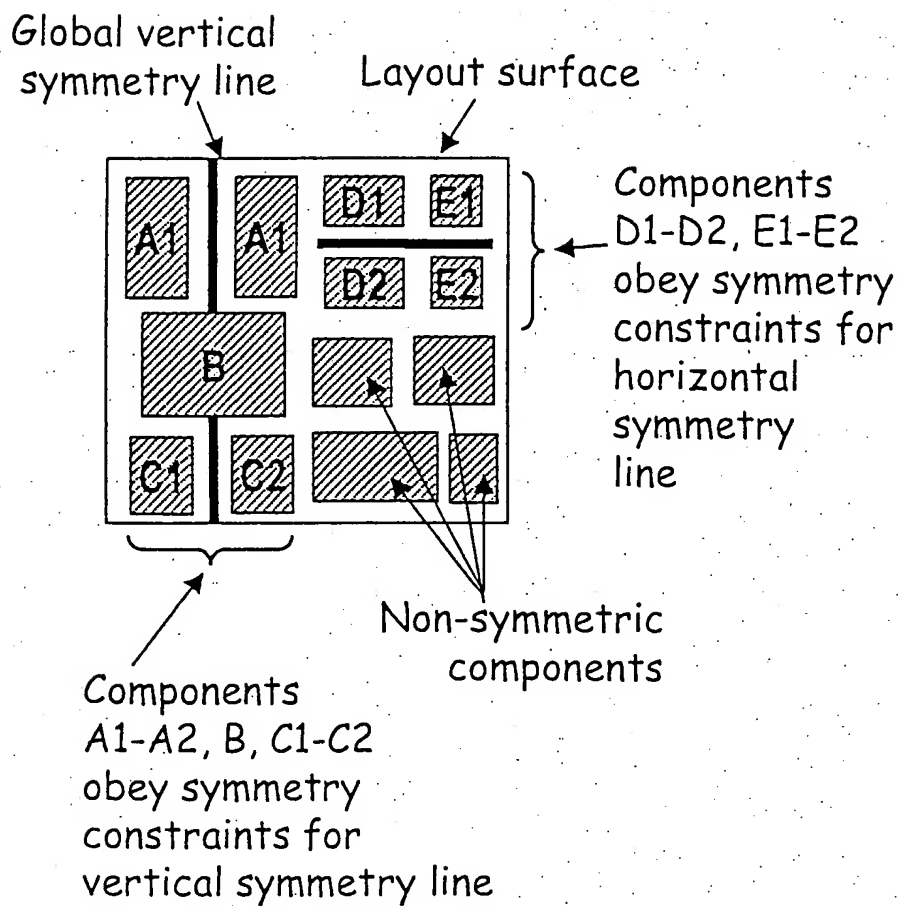


Fig 15

(prior art)

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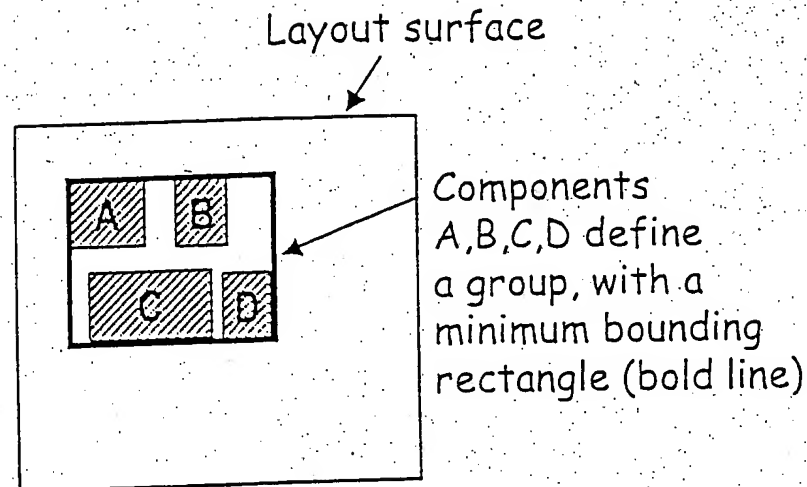


Fig 16  
(prior art)

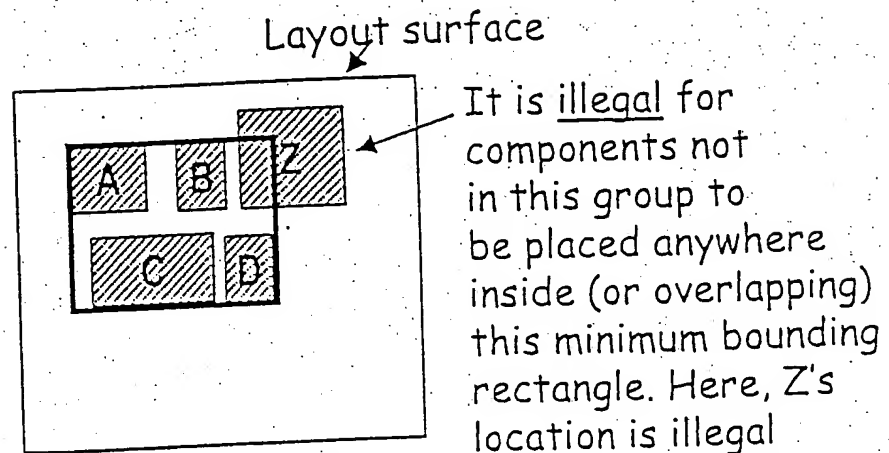
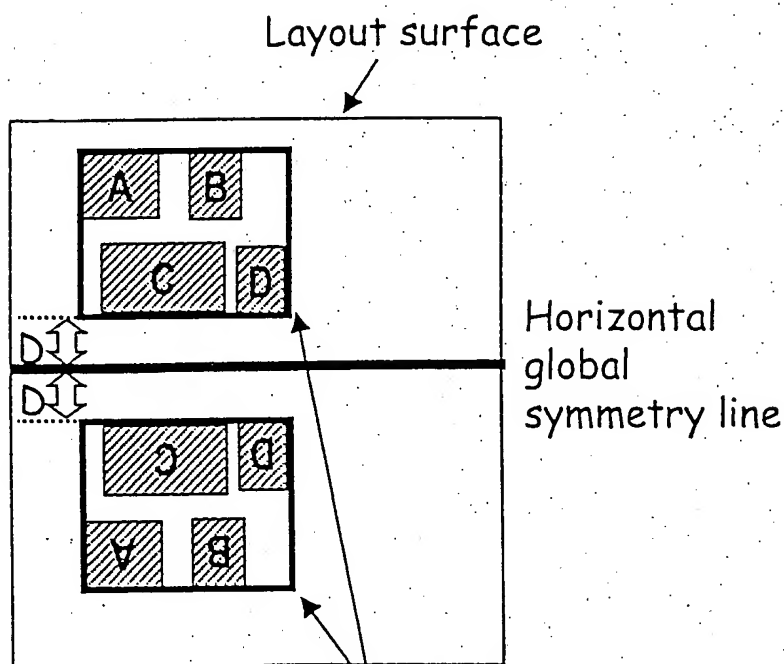


Fig 17  
(prior art)

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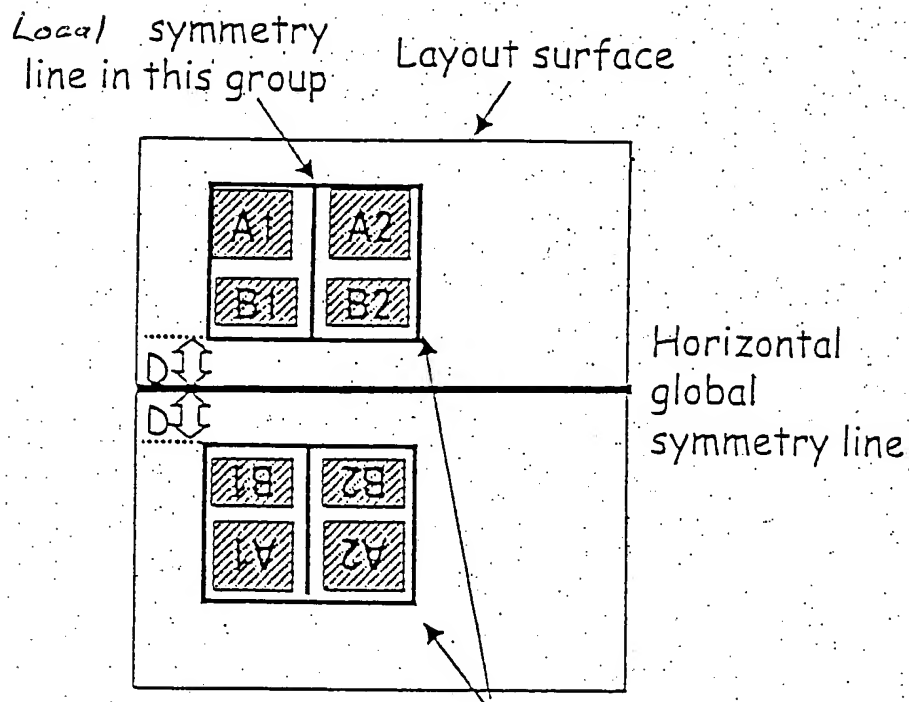


Group A,B,C,D and  
its symmetric sibling  
placed with a  
group symmetric pair  
constraint, relative to a  
global horizontal symmetry line

Fig 18

(prior art)

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Each Group A1,A2,B1,B2 has a local symmetry line and the entire group and its symmetric sibling are placed with a group symmetric pair constraint relative to a global horizontal symmetry line

Fig 19

(Prior art)

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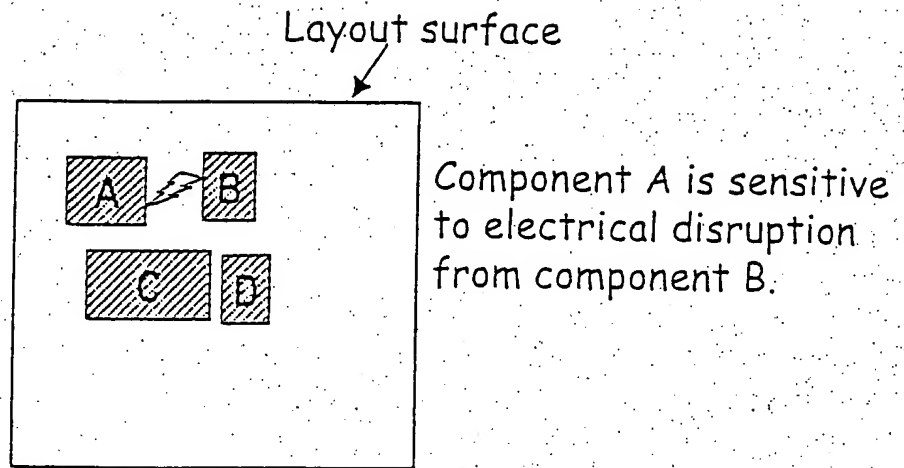


Fig 20  
(prior art)

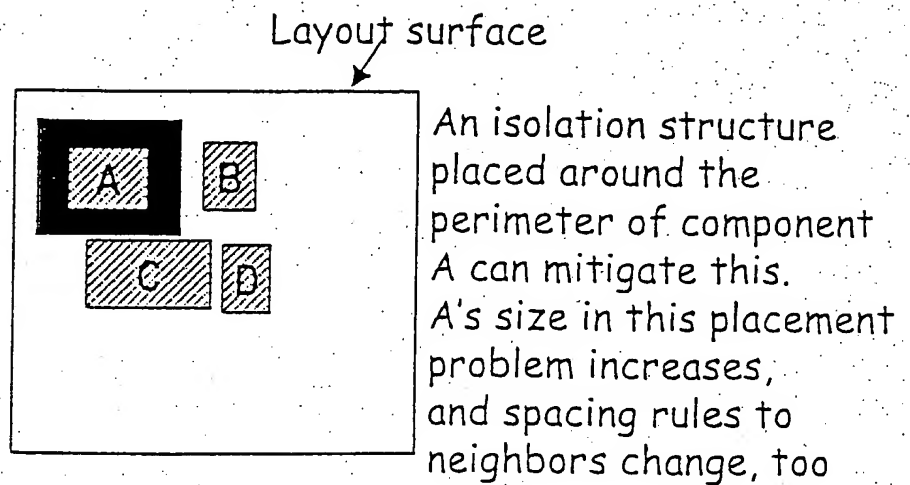


Fig 21  
(prior art)

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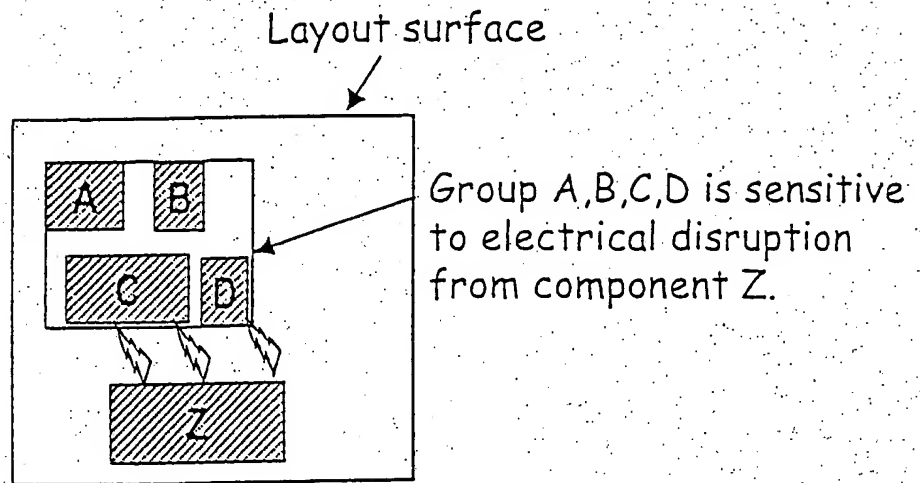


Fig 22  
(prior art)

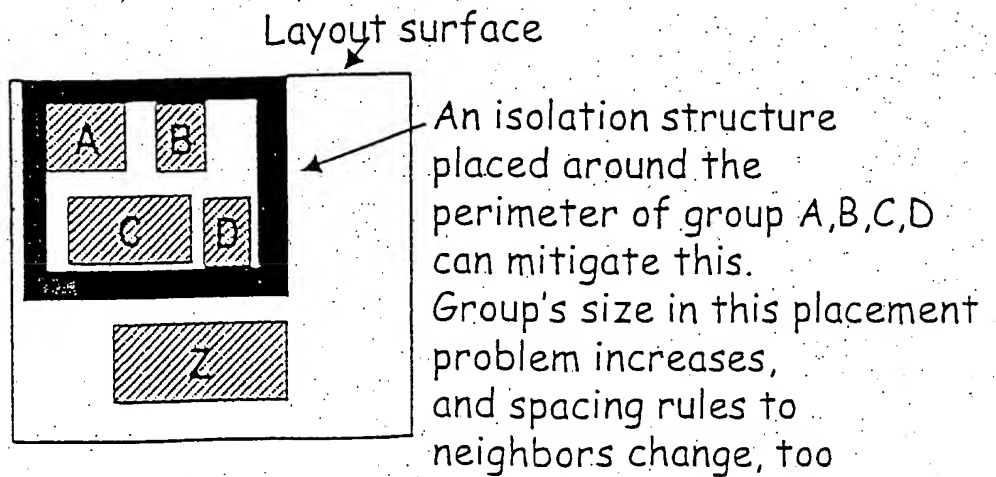


Fig 23  
(prior art)

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Fig. 24

<u>Component</u>	<u>Placement Constraint</u>	<u>Size</u>	
		<u>Width</u>	<u>Height</u>
A	Non-Symmetric	2	2
B	Non-Symmetric	1	5
Q	Symmetric*	3	2
X	Non-Symmetric	2	5
Y	Non-Symmetric	1	5

\* Component can be designated for pair-symmetric, self-symmetric, asymmetric, or fixed symmetric offset placement.

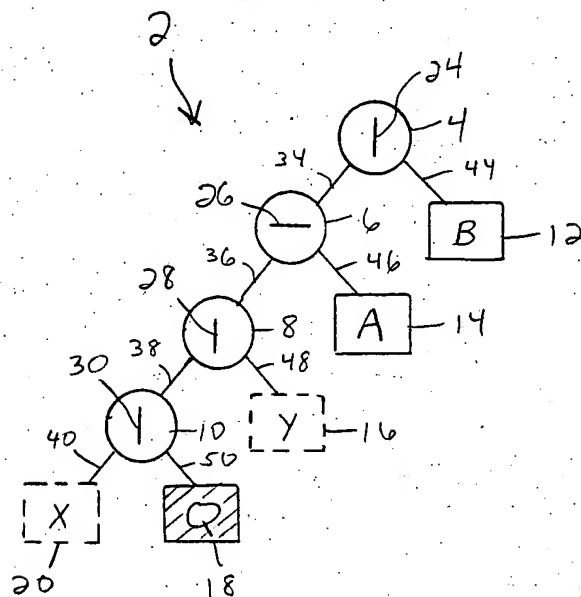



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
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Fig 25



 = place on left side of global symmetry line 24

 = place on right side of global symmetry line 24

 = place pair symmetrically on both sides of global symmetry line 24

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Fig 26

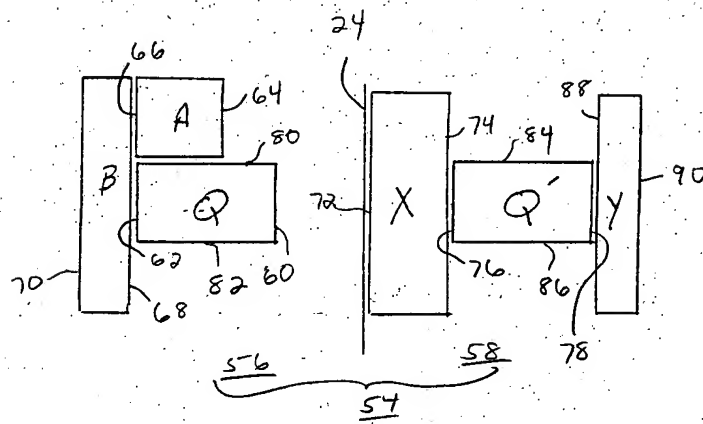
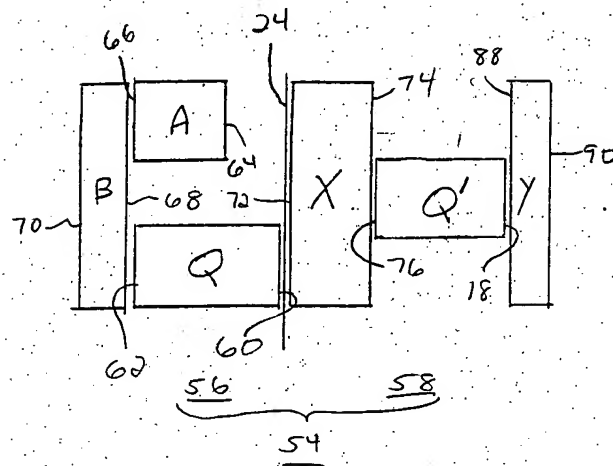
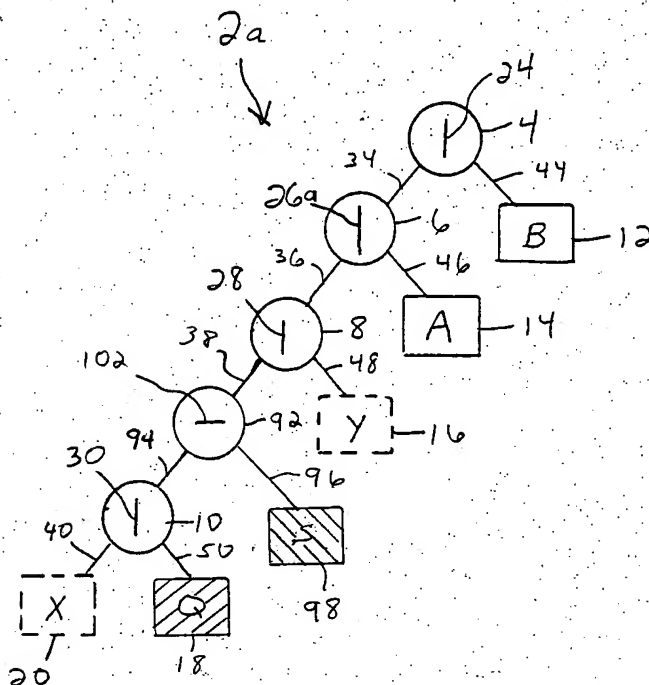




Fig 27


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
Fig 28



 = place on left side of global symmetry line 24

 = place on right side of global symmetry line 24

 = place pair-symmetrically on both sides of global symmetry line 24

 = place self-symmetrically on both sides of global symmetry line 24

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Fig 29

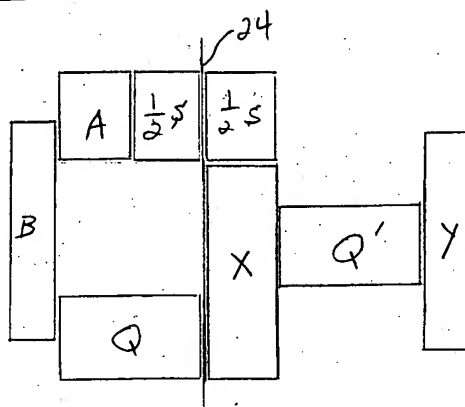
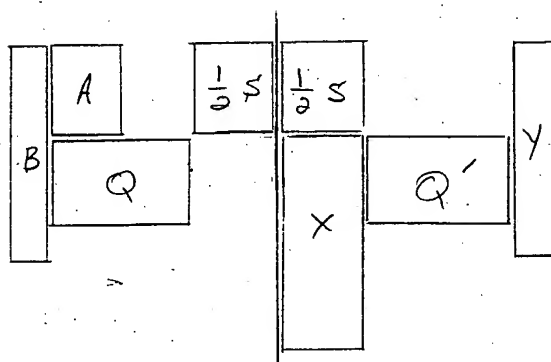


Fig 30

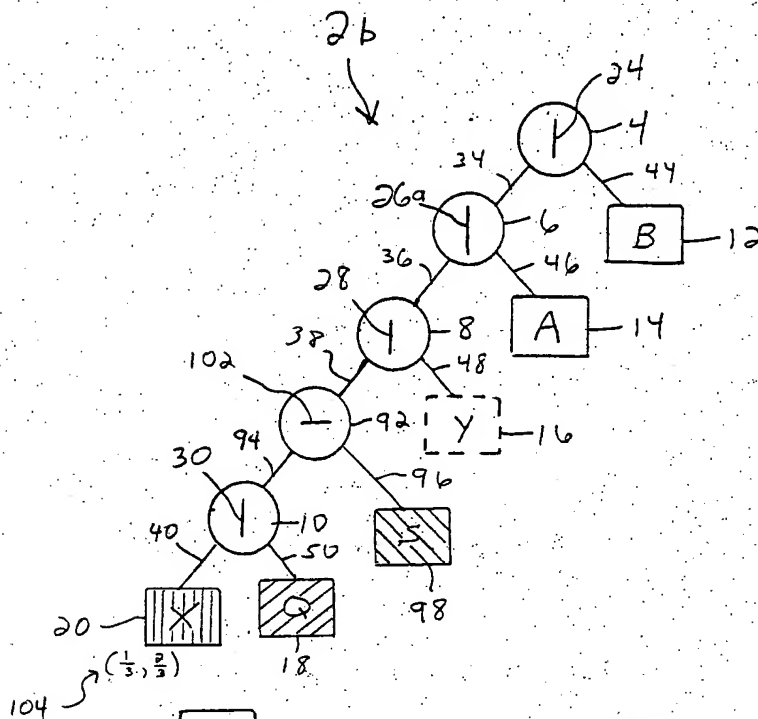



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
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
Fig 31




 = place on left side of global symmetry line 24

 = place on right side of global symmetry line 24

 = place pair-symmetrically on both sides of global symmetry line 24

 = place self-symmetrically on both sides of global symmetry line 24

 = place Asymmetrically on both sides of global symmetry line 24

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Fig 32

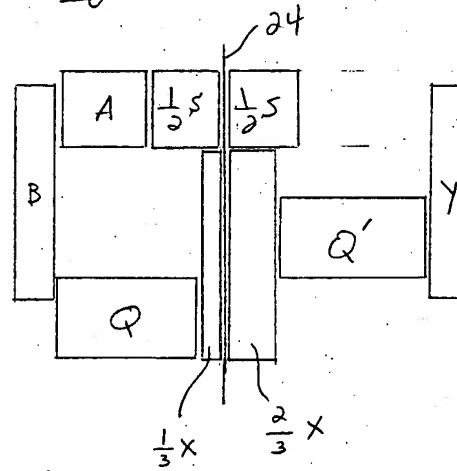
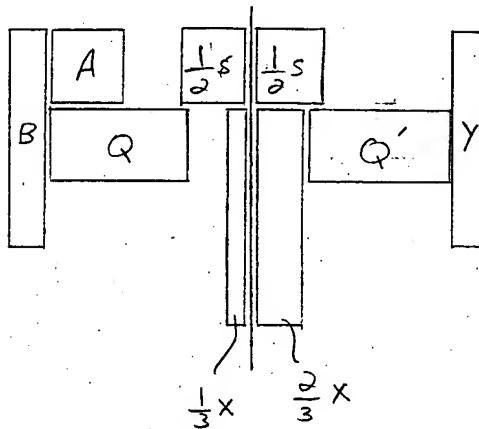
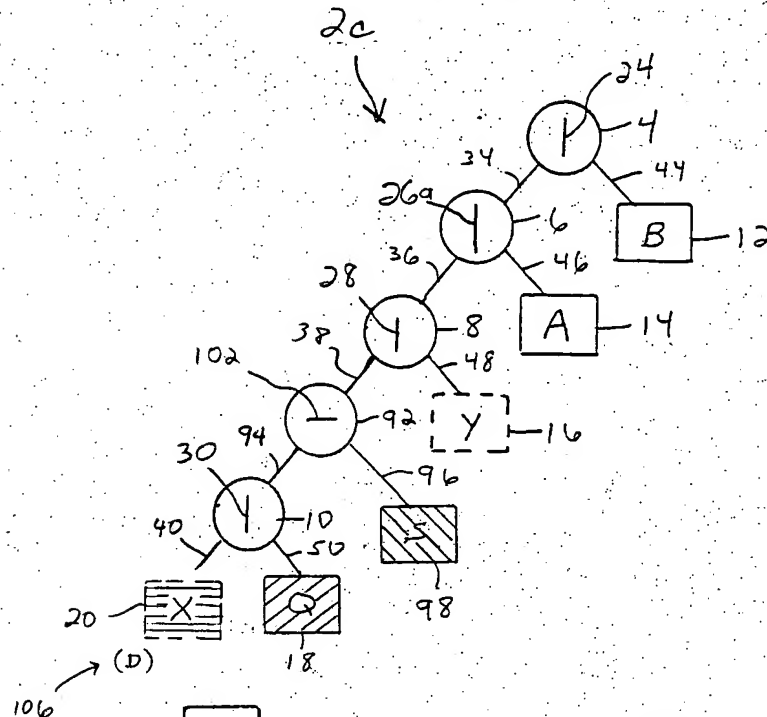



Fig 33





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
Fig 34




 = place on left side of global symmetry line 24

 = place on right side of global symmetry line 24

 = place pair-symmetrically on both sides of global symmetry line 24

 = place self-symmetrically on both sides of global symmetry line 24

 = place fixed symmetric offset to one side of global symmetry line 24 (dashed outline = place on right side; solid outline = place on left side)

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Fig 35

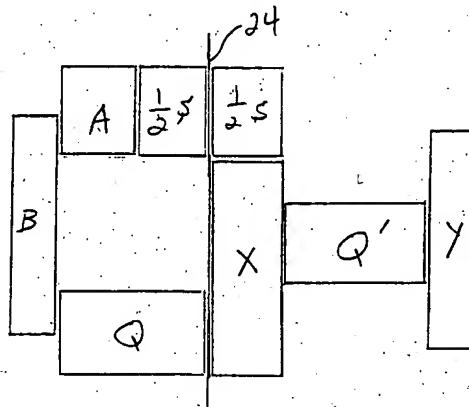
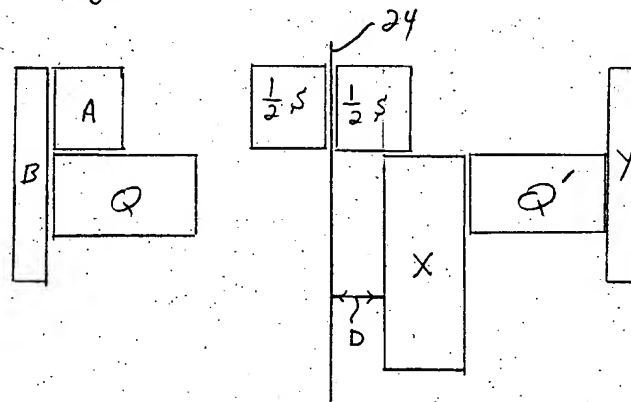


Fig 36



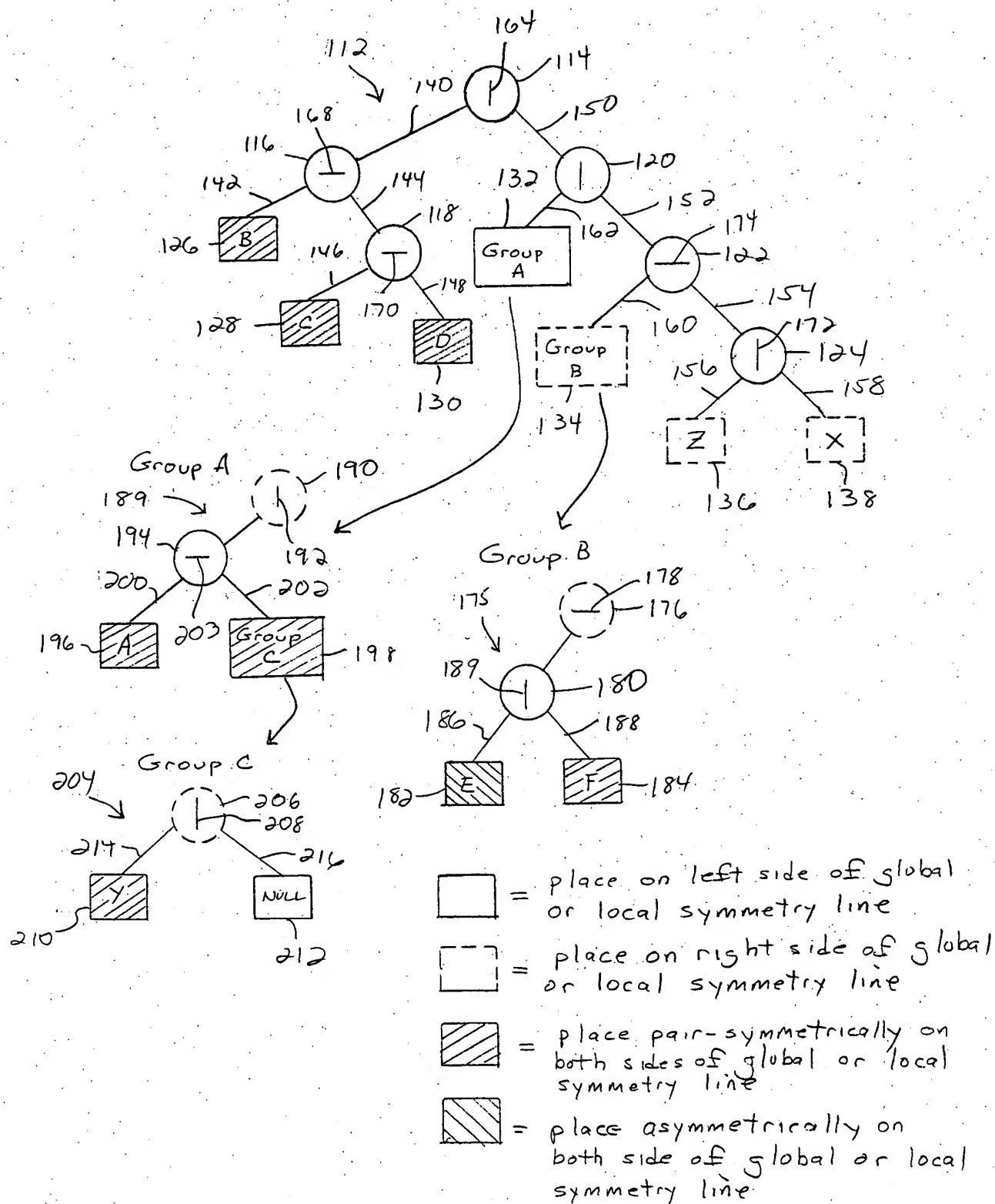


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Fig 37



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Fig 38

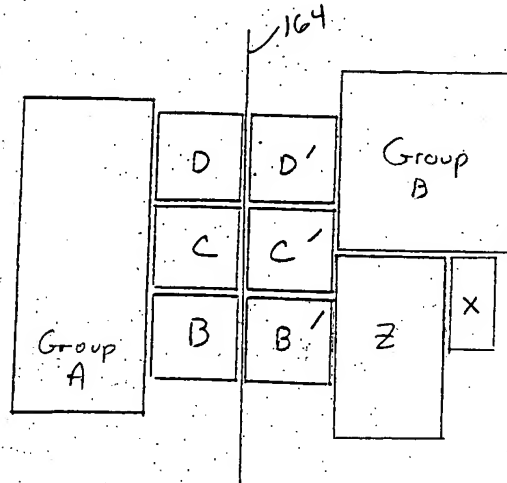
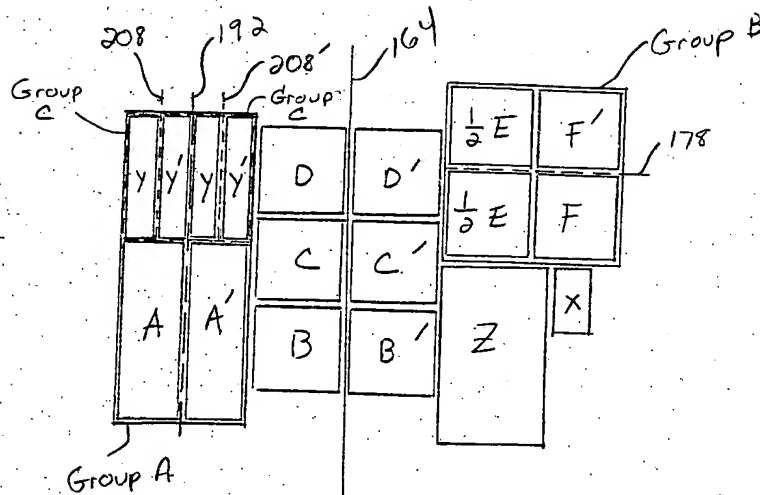


Fig 39



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Fig 40a

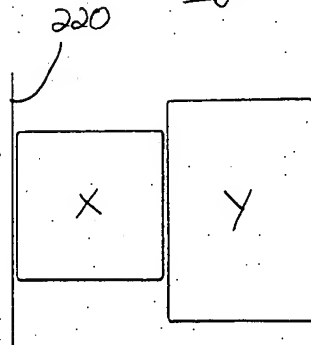
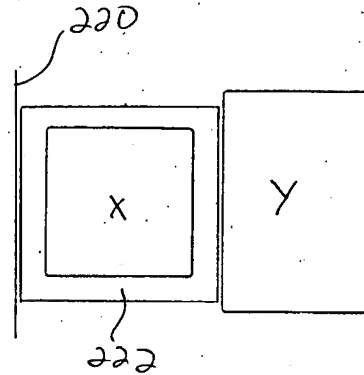


Fig 40b

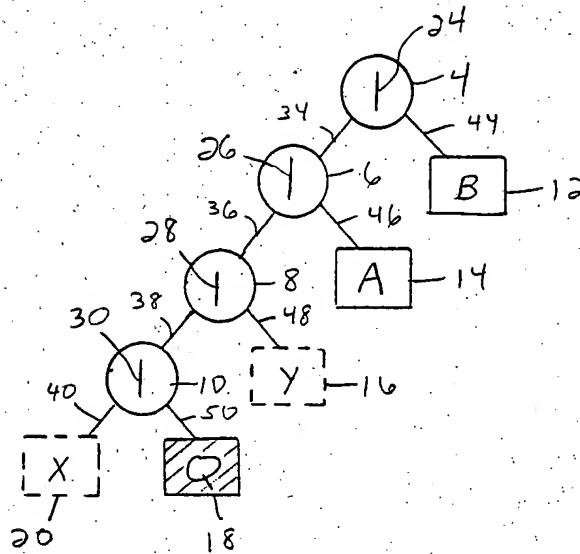





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Fig 41



-  = place on left side of global symmetry line 24
-  = place on right side of global symmetry line 24
-  = place pair symmetrically on both sides of global symmetry line 24

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Fig 42

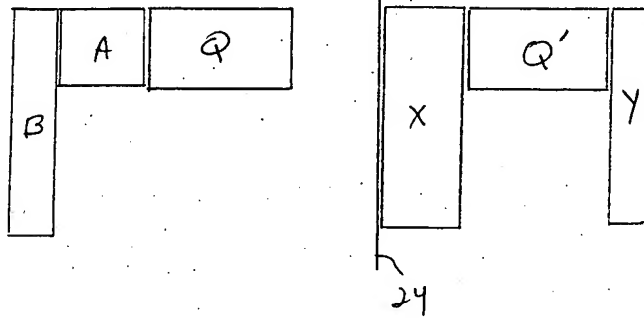


Fig 44

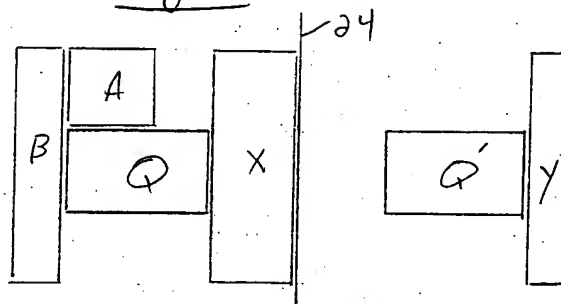


Fig 46

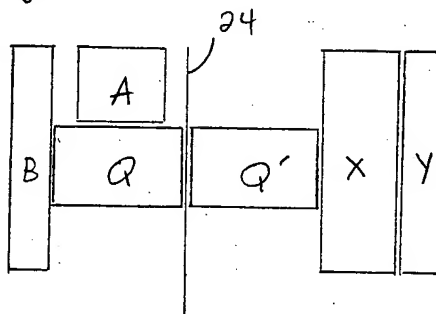
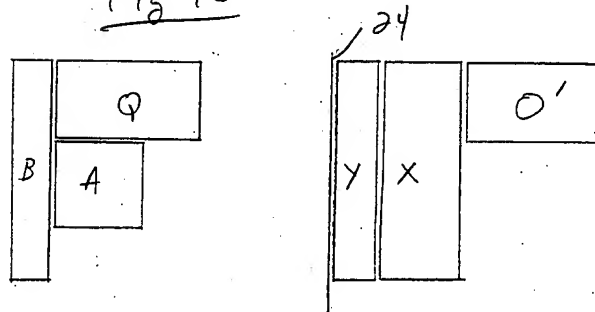


Fig 48

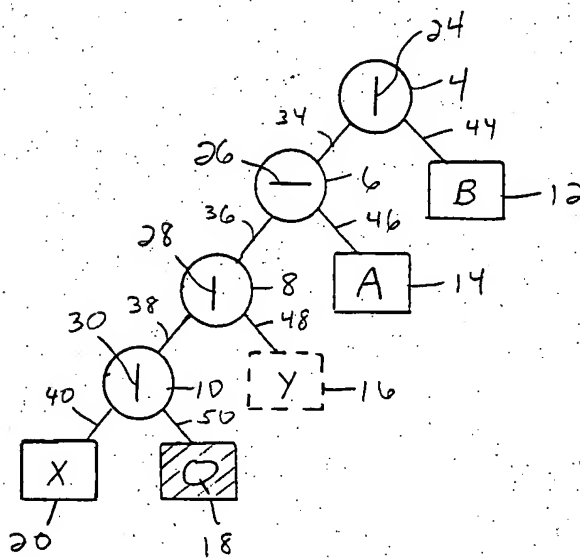



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
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Fig 43



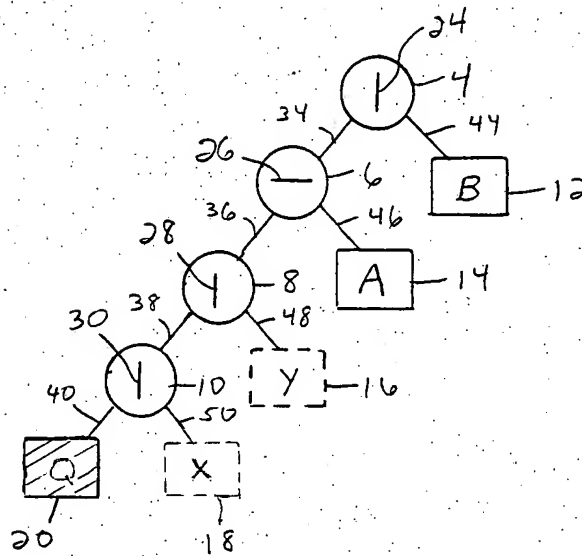
 = place on left side of global symmetry line 24


 = place on right side of global symmetry line 24


 = place pair symmetrically on both sides of global symmetry line 24


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Fig 45



 = place on left side of global symmetry line 24

 = place on right side of global symmetry line 24

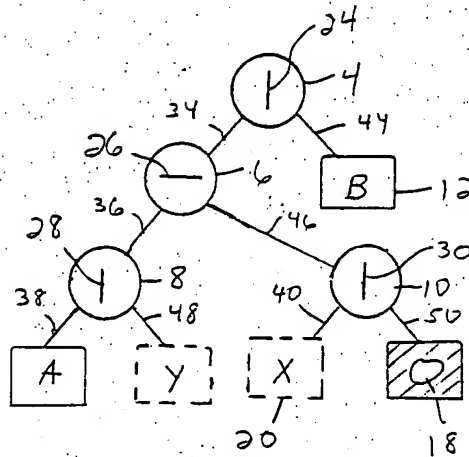
 = place pair symmetrically on both sides of global symmetry line 24




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Fig 47



-  = place on left side of global symmetry line 24
-  = place on right side of global symmetry line 24
-  = place pair symmetrically on both sides of global symmetry line 24